

Claims:

- An adjustable lumbar support assembly (12), comprising
- an adjustable lumbar support member (14);
 - a bowden cable actuator (16) for actuating a bowden cable (18; 70) having a first wire-portion (52; 74) and a second wire portion (26; 74); and
- a transmission amplifier assembly for the Bowden. cable (18; 70), the transmission amplifier assembly (10; 10 10''') comprising a rotary member (82) being supported rotatably, the bowden cable (18; 70) with the first wire portion (52; 74) being connected between the bowden cable actuator (16) and the transmission amplifier assembly (10; 10''') and with the second wire portion (26; 74) 15 being connected between the transmission amplifier assembly (10; 10''') and the adjustable lumbar support member (14), and the first wire portion (74) and the second wire portion (74) of the bowden cable (18; 70) being both coupled to the rotary member (82) such that 20 movement of the first wire portion (52; 74) imparts rotation of the rotary member (82) and thereby movement of the second wire portion (26; 74) in accordance with a predetermined transmission ratio, the movement of the second wire portion (26; 74) being facilitated compared 25

to the movement of the first wire portion (52; 74) by the predetermined transmission ratio.

- 2. The adjustable lumbar support assembly

 5 according to claim 1, wherein the transmission amplifier assembly (10; 10''') is arranged such that the movement of the first wire portion (52; 74) imparts the movement of the second wire portion (26; 74), which is increased by the predetermined transmission ratio with respect to the movement of the first wire portion (52; 74).
- 3. The adjustable lumbar support assembly according to claim 1 or claim 2, wherein the first wire portion (74) and the second wire portion (74) both are directly fixed at the rotary member (82).
 - 4. The adjustable lumbar support assembly according to any one of claims 1-3, wherein the first wire portion (74) and the second wire portion (74) extend both along a periphery of the rotary member (82).

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5. The adjustable lumbar support assembly according to claim 4, wherein the first wire portion (74) and the second wire portion (74) extend both along respective grooves formed in the periphery of the rotary member (82).



6. The adjustable lumbar support assembly according to any one of claims 1-5, wherein the rotary member (82) has a substantially longitudinal shape.

- 7. The adjustable lumbar support assembly according to claim 6, wherein the rotary member (82) has a substantially elliptic shape.
- 10 8. The adjustable lumbar support assembly according to any one of claims 1-7, wherein the rotary member (82) has a substantially increasing width from a portion of the rotary member (82) where the first wire portion (74) leaves the periphery of the rotary member (82) to a portion of the rotary member (82) where the second wire portion (74) leaves the periphery of the rotary member (82).
- 9. The adjustable lumbar support assembly
 20 according to any one of claims 1-8, wherein the rotary
 member (82) is supported rotatably around a point of
 rotation (86), the point of rotation (86) being arranged
 eccentrically in a longitudinal direction of the rotary
 member (82).

10. The adjustable lumbar support assembly according to any one of claims 1-9, wherein the first wire portion and the second wire portion are formed by a single wire (74) movable in the sleeve (72) of the bowden cable (70).

according to any one of claims 1-10, wherein the sleeve

(72) of the bowden cable (70) is held in place by a

10 holding member (76).

- 12. The adjustable lumbar support assembly according to any one of claims 1-11, wherein a guiding member (78) for guiding the first wire portion (74) towards the rotary member (82) and a guiding member (78) for guiding the second wire portion (74) from the rotary member (82) are provided.
- 13. The adjustable lumbar support assembly
 20 according to claim 12, wherein the guiding member for the
 first wire portion (74) and the guiding member for the
 second wire portion (74) are formed by a common guiding
 member (78).
- 25 14. The adjustable lumbar support assembly according to any one of claims 1-13, wherein the

transmission amplifier assembly (10; 10''') is arranged such that a lever arm defined between the second wire portion (74) and a point of rotation (86) of the rotary member (82) is larger than a lever arm defined between the first wire portion (74) and the point of rotation (86) by the predetermined transmission ration.

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- 15. The adjustable lumbar support assembly according to any one of claims 1-14, wherein the transmission amplifier assembly (10; 10''') is attached to the adjustable lumbar support member (14).
 - 16. A method of adjusting a lumbar support member, comprising the steps:
- of a bowden cable (18; 70) relative to a sleeve (54; 72) of the bowden cable (18; 70) via a bowden cable actuator (16);
- converting the motion of the first wire portion

 (52; 74) into motion of a second wire portion (26; 74) in

 accordance with a predetermined transmission ratio, the

 conversion being such that the motion of the second wire

 portion (26; 74) being facilitated compared to the motion

 of the first wire portion (52; 74) by the predetermined

 transmission ratio;

adjusting the lumbar support member (14) in response to the motion of the second wire portion (26; 74).